DOCUMENT RESUME

ED 184 821 SE 030 370

AUTHOR Sunal, Dennis W.
TITLE Affective Measures for Science Teaching: Measures of Teacher Interest and Attitude Toward Science Teaching. A. Teaching Preference Scale. B. Semantic Differential Instrument for Science Teaching.
PUB DATE 75
NOTE 7p.: For related documents, see SE 030 371-373.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attitude Measures: Elementary Education: Elementary School Science: *Interest Inventories: *Measures (Individuals): *Science Education: Science Teachers: Semantic Differential: *Teacher Attitudes

ABSTRACT

Presented are measures of teacher interest and attitude toward science teaching. A sheet is attached which describes how the instruments should be used and results analyzed. Part I includes a Teaching Preference Scale for predicting effective inquiry model use for self-contained classrooms in grades 1-6. Part II is a Semantic Differential Instrument for Science Teaching involving attitudes expressed toward the three concepts of (1) nature, (2) a student learning about science in school, and (3) myself teaching science in the classroom. (CS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED184821

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Dennis Sunal

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

AFFECTIVE MEASURES FOR SCIENCE TEACHING

Measures of Teacher Interest and Attitude Toward Science Teaching

A. Teaching Preference Scale

B. Semantic Differential Instrument for Science Teaching

Dennis W. Sunal

Department of Curriculum and Instruction

West Virginia University

Morgantown, WV 26506

SE 030 370

© 1975 Dennis W. Sunal

User Information
for
Affective Measures for Science Teaching

Part A The Teaching Preference Scale is a strong predictor of effective inquiry model use for self contained classrooms in grades 1-6. For analysis, items 2, 4, 5, may only be used, throwing out items 1, 3, 6. Reverse value of item 5 for this analysis. All items can be used to get overall preference of teaching interest in content areas and mathematics. Reverse values 1, 3, 5, and 6 for this analysis.

Part B The Semantic Differential Instrument for Science Teaching involves attitudes expressed toward three concepts

- nature
- a student learning about science in school
- myself teaching science in the classroom

This instrument is used in a pre-post format to detect change in attitude in these three areas. The covered time period may include a semester course, a unit, or a field experience. For analysis reverse 1/2 of the item values. Those items which are to be reversed in value (0=4, 1=3, 2=2, 3=1, 4=0) include

nature	7, 10, 12, 15, 17, 18, 20, 21, 24
a student	25, 28, 30, 33, 35, 36, 38, 39, 42
myself	43, 46, 48, 51, 53, 54, 56, 57, 60

Teaching Preference Scale

For teachers in self contained and integrated

Subject Settings

Below are six pairs of subjects which are covered in most schools, including some or all grades K-8. Look at the pairs one at a time and indicate on the answer sheet the subject you personally would find teaching the more interesting of the two. Mark either A or B for each Pair 1-6.

Mark the appropriate space in the computer answer sheet. Please use a number 2 pencil and fill in spaces completely.

	A	B
1.	Math	Language Arts
2.	Social Studies	Science
3.	Math	Social Studies
4.	Language Arts	Science
5.	Science	Math
6.	Social Studies	Language Arts

© 1975 Dennis W. Sunal

Semantic Differential Instrument for Science Teaching

DIRECTIONS:

Below you will be asked to describe your feelings toward different ideas. There are no "right" or "wrong" answers. In each group of questions you will find a heading printed like this

MATH

Below you will find pairs of words that you will use to describe your image of the heading. Each pair of words will be answered on a scale which looks like this:

QUICK (A) (B) (C) (D) (E) SLOW

You are to fill in the computer answer sheet box which best represents how you feel that word pair describes the heading at the top of the page. For example, you might check the "QUICK-SLOW" scale this way for "MATH".

If you feel that "MATH" is very closely connected with "QUICK," check the scale like this:

QUICK ■ (B) (C) (D) (E) SLOW

If you feel that "MATH" is only somewhat connected with "QUICK," check the scale like this:

QUICK (A) ■ (C) (D) (E) SLOW

If you feel that "MATH" is equally connected with "QUICK" and "SLOW" or <u>not connected with either</u>, check the scale like this:

QUICK (A) (B) ■ (D) (E) SLOW

If you feel that "MATH" is somewhat connected with "SLOW" or very closely connected with "SLOW," you would check one of the boxes next to "SLOW."

Look at the heading at the top of the page; get an impression of it in your mind, and then work down the page checking the scale as <u>quickly</u> as you can. We are interested in your first impressions, so work rapidly and do not go back and change any marks.

<u>Be sure to check every scale</u> and make only one check on each Scale, A B C D or E. Begin with 7 on the Computer Answer Sheet.

© 1975 Dennis W. Sunal

NATURE

MARK

A B C D E

7. IMPORTANT . . . . . UNIMPORTANT
8. MESSY . . . . . NEAT
9. DANGEROUS . . . . . SAFE
10. INTERESTING . . . . . DULL
11. UNKNOWABLE . . . . . KNOWABLE
12. VALUABLE . . . . . WORTHLESS
13. CLUTTERED . . . . . ORDERLY
14. CONFUSING . . . . . UNDERSTANDABLE
15. EXCITING . . . . . BORING
16. THREATENING . . . . . COMFORTING
17. SIMPLE . . . . . DIFFICULT
18. PRODUCTIVE . . . . . UNPRODUCTIVE
19. ROUGH . . . . . SMOOTH
20. STIMULATING . . . . . MONOTONOUS
21. EFFORTLESS . . . . . DEMANDING
22. RISKY . . . . . SECURE
23. MYSTERIOUS . . . . . CLEAR
24. EASY . . . . . HARD

A STUDENT LEARNING ABOUT SCIENCE IN SCHOOL

MARK

A B C D E

25. IMPORTANT . . . . . UNIMPORTANT
26. MESSY . . . . . NEAT.
27. DANGEROUS . . . . . SAFE.
28. INTERESTING . . . . . DULL.
29. UNKNOWABLE . . . . . KNOWABLE
30. VALUABLE . . . . . WORTHLESS
31. CLUTTERED . . . . . ORDERLY
32. CONFUSING . . . . . UNDERSTANDABLE
33. EXCITING . . . . . BORING
34. THREATENING . . . . . COMFORTING
35. SIMPLE . . . . . DIFFICULT
36. PRODUCTIVE . . . . . UNPRODUCTIVE
37. ROUGH . . . . . SMOOTH
38. STIMULATING . . . . . MONOTONOUS
39. EFFORTLESS . . . . . DEMANDING
40. RISKY . . . . . SECURE
41. MYSTERIOUS . . . . . CLEAR
42. EASY . . . . . HARD

MYSELF TEACHING SCIENCE IN THE CLASSROOM

MARK

A B C D E

43. IMPORTANT . . . . . UNIMPORTANT
44. MESSY . . . . . NEAT
45. DANGEROUS . . . . . SAFE
46. INTERESTING . . . . . DULL
47. UNKNOWABLE . . . . . KNOWABLE
48. VALUABLE . . . . . WORTHLESS
49. CLUTTERED . . . . . ORDERLY
50. CONFUSING . . . . . UNDERSTANDABLE
51. EXCITING . . . . . BORING
52. THREATENING . . . . . COMFORTING
53. SIMPLE . . . . . DIFFICULT
54. PRODUCTIVE . . . . . UNPRODUCTIVE
55. ROUGH . . . . . SMOOTH
56. STIMULATING . . . . . MONOTONOUS
57. EFFORTLESS . . . . . DEMANDING
58. RISKY . . . . . SECURE
59. MYSTERIOUS . . . . . CLEAR
60. EASY . . . . . HARD